



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,604	03/12/2004	Paul Febvre	1487.0150001	6207

26111 7590 10/16/2007
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

NGUYEN, TU X

ART UNIT	PAPER NUMBER
----------	--------------

2618

MAIL DATE	DELIVERY MODE
-----------	---------------

10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/798,604

Applicant(s)

FEBVRE ET AL.

Examiner

Tu X. Nguyen

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 14, 19, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) 1-12, 15-18 and 20-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 14, 19, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 9/27/07 have been fully considered but they are not persuasive.

In response to Applicants argument "Claim 13 requires that the waiting for a period occurs **If a collision is detected**", the Examiner disagrees, Eng discloses when the collision occurs, the decision circuit determines (fig.13, step S11) when to perform such a retransmission (fig.13 step S13, "when to" corresponds to "waiting for a period"). And "assigning specific slots for transmission", corresponds to "indicates a range and includes an increment" wherein time slot is read in term of "range" as describes in Applicant specification, "range" as an interval. Applicants further argue "In contrast, the passage cited from the Eng, the waiting occurs only if a collision is not detected", the Examiner agrees and suggest that Applicant to amend the claim limitation to "**when** a collision is detected" in order the claim limitations such as: "waiting for a period determined according to a repeat parameter before repeating steps a) and b), wherein said repeat parameter is received by said transceiver and wherein said repeat parameter indicates a range and includes an increment by which said range is increased after each repetition of steps a) and b)" to be considered.

Regarding claim 19, Applicants argue Eng does not teach or suggest "for each forward frequency channel, a set of preferred return frequency channels is stored, such that for each of said transceivers to which a specified one of said forward frequency channels is allocated, the allocated one or more return frequency channels is preferentially selected from said

corresponding set of preferred return frequency channels,". The Examiner disagrees, Eng discloses "Each downstream channel is assigned for carrying at least downstream directed control bitstreams, such as bitstreams containing acknowledgments and also containing indications of assigned slots in the upstream payload channel, from the central controller to the station" (col.8 line 66 through col.9 line5).

Regarding claim 26, Applicants argue "In the arrangement disclosed by Eng, the headend does not monitor payload data received from the subscriber stations to predict how much channel capacity each subscriber station is likely to require in the future. Instead, the headend merely allocates the number of time slots that each subscriber requests. Thus, the headend in Eng is merely responsive to request packets in which the subscriber stations request channel capacity, but is incapable of proactively determining how much capacity the subscriber stations are likely to require based upon the content of payload data". The Examiner disagrees, Eng disclose ""in response to receiving a reservation request, e.g., the address of the requesting SS, the amount of requested slot capacity, etc" (col.19 lines 5-9), corresponds to "monitor data transmitted to said transceiver", and the headend determines the resource available, collision, slot capacity, e.g. and the resource allocator generates a slot assignment to the downstream RF transmitter (col.20 lines 40-60), corresponds to "transmitting to said transceiver an allocation signal indicating an allocation in said channel determined according to said predicted demand".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 13-14, 19 and 26-27, are rejected under 35 U.S.C. 102(a) as being anticipated by Eng (US Patent 6370153).

Regarding claim 13, Eng discloses a method of transmission in a contention-based access channel by a wireless transceiver, comprising:

a) transmitting a burst in said channel (see col.14 lines 6-7);
b) detecting whether said burst has collided with another burst in said channel (see col.17 lines 29-34); and, if a collision is detected at said detecting step, waiting for a period determined according to a repeat parameter before repeating steps a) and b) (see col.17 lines 19-27),

wherein said repeat parameter is received by said transceiver and wherein said repeat parameter indicates a range and includes an increment by which said range is increased after each repetition of steps a) and b) (see col.16 lines 59-60, col.17 lines 37-38, "the persistent parameter, the next available collision resolution mini-slot" corresponds to "indicates a range and includes an increment by which said range is increased").

Regarding claim 14, Eng discloses wherein said period is randomly or pseudo-randomly selected from said range indicated by said repeat parameter (see col.16 lines 63-64).

Regarding claim 19, Eng discloses a method of allocating frequency channels to a plurality of wireless transceivers, comprising:

transmitting to each of said transceivers a forward frequency channel allocation signal indicating an allocation of one or more forward frequency channels which that transceiver is to receive (see col.9 lines 1-5); and

transmitting to each of said transceivers, in at least one said forward frequency channels assigned to that transceiver, a respective return channel allocation signal indicating an allocation of one or more return frequency channels in which that transceiver may transmit (see col.9 lines 6-24);

wherein, for each forward frequency channel, a set of preferred return frequency channels is stored (see col.8 line 60 through col.9 line 4, "central controller" is inherent includes memory for schedule channel assignments), such that for each of said transceivers to which a specified one of said forward frequency channels is allocated, the allocated one or more return frequency channels is preferentially selected from said corresponding set of preferred return frequency channels (see col.8 line 60 through col.9 line 4).

Regarding claim 26, Eng discloses a method of controlling transmission by a wireless transceiver in a channel shared with transmission by other transceivers, comprising:

monitoring data transmitted to said transceiver (see col.18 line 59 through col.19 line 10);

detecting the content of said monitored data (see col.19 lines 6-10);
predicting, on the basis of said monitoring step, a demand for capacity in said channel
by said transceiver (see col.20 lines 40-60), and
transmitting to said transceiver an allocation signal indicating an allocation in said
channel determined according to said predicted demand (col.20 lines 40-60).

Regarding claim 27, Eng discloses including generating a statistical model based on
previous traffic flow to and from wireless transceivers, wherein the demand for capacity is
predicted according to said statistical model (see col.19 lines 60-66).

Conclusion


THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy
as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within TWO
MONTHS of the mailing date of this final action and the advisory action is not mailed until after
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,
however, will the statutory period for reply expire later than SIX MONTHS from the mailing
date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



October 11, 2007